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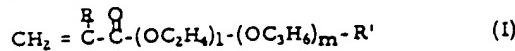
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SYNTHETIC FIBRES-ANTISTATIC TREATMENT - TO IMPROVE DIRT-REPELLENCY AND WATER-ABSORPTION USING POLYALKYLENE OXIDE MONOMER

NEW

Antistatic, dirt-repellent and water-absorbing characteristics are conferred onto synthetic fibres by applying a cpd. comprising (A) a monomer contg. no quaternary N gp but which has at least 2 terminal acrylic and/or methacrylic gps. at both ends or at one end or as side chains, and consists mainly of a polyalkyleneoxide segment; (B) a copolymer of a cpd. (I) with some other comonomer and/or a divinyl cpd.



R is H or Me, R' is Cl, Br, I, OCH<sub>3</sub>, OC<sub>2</sub>H<sub>5</sub>, SCH<sub>3</sub>, or SC<sub>2</sub>H<sub>5</sub>; m = 0-10, 10 < 1, or (C) a mixture of (a) cpd. having a polymerisable vinyl gp. at one end or as side chain, a polyalkyleneglycol whose polyalkylene oxide segment has mol. wt. 400-10000, with (b) a vinyl monomer having

A4-A, A4-B1, A4-E, A4-F6E2, A10-E7, A12-G3,  
A12-G, A12-S5M.

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at least 2 vinyl gps.; and then heat-treating the fibres in presence of humidity.

USES

Treatment is suitable e.g. for textiles comprising polyolefin, rayon, polyester, nylon, or polyacrylonitrile fibres.

ADVANTAGE

Strength of fibres is not affected; no discolouration occurring. Good fastness to washing. Relatively small amounts of treating agent are required.

SPECIFICALLY

Treatment may be in presence of steam. The fibres are immersed into an aq. soln. of the cpds. and polymn. is then effected by heating. A polymn. initiator, pref. in dispersed form, may be present. A cationic antistatic agent, or an alkylethylene urea and deriv. may be incorporated.

EXAMPLE

A suitable formulation comprises an aq. soln. of 3 wt % polyethyleneglycol dimethacrylate whose polyoxyethylene segment has mol. wt. 500, admixed with 0.3 wt % 14712U (NH<sub>2</sub>)<sub>2</sub>SO<sub>8</sub> as polymn. initiator.